



#4

## SEQUENCE LISTING

<110> Zyskind, Judith W.  
Forsyth, Allyn

<120> METHOD FOR IDENTIFYING MICROBIAL  
PROLIFERATION GENES

<130> 07252/008002

<140> 09/805,664

<141> 2001-03-13

<150> 08/971,090

<151> 1997-11-14

<160> 9

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer 5' to 3'

<400> 1

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18

<210> 2

<211> 18

<212> DNA

<213> Artificial Sequence

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<223> Primer 5' to 3'

<400> 2

acaatttcac acagcctc

18

<210> 3

<211> 546

<212> RNA

<213> Escherichia coli lepB

<400> 3

cugcagaagc	agaaagaagg	uaagaaacgc	augaagcaga	ucgguaacgu	cgagcugccg	60
caggaagcgu	uccucgccau	ucugcacguc	ggcaaagaca	acaaauaacc	cuuaggaguu	120
ggcauggcga	auauguuugc	ccugauucug	gugauugcca	cacuggugac	gggcauuuuu	180
uggugcgugg	auaaaauucu	uuucgcaccu	aaacggcggg	aacgucaggc	agcggcgag	240
gcggcucggg	acucacugga	uaaagcaacg	uugaaaaagg	uugcgccgaa	gccuggcugg	300
cuggaaaccg	gugcuucugu	uuuuccggua	cuggcuauca	uauugauugu	gcguucguuu	360
auuuauugaac	cguuccagau	cccguccaggu	ucgaugaugc	cgacucuguu	aaauuggugau	420
uuuauucugg	uagagaaguu	ugcuuauggc	auuaaagauc	cuaucuaacca	gaaaacgcug	480

aucgaaaacg gucauccgaa acgcggcgau aucguggucu uuaaaauaucc ggaagaacca	540
aagcuu	546

<210> 4

<211> 714

<212> RNA

<213> Escherichia coli viaA

<400> 4

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aaacaaagg	caaucaccug	aucuaagcuc	uuaccuauga	cagugauagg	uuauGCCUUU	120
uacucgacu	uugcacugac	ugaaaaggac	aaauuaaugu	uaaaaaagau	acuuuuacug	180
gcucugcuu	cugcaaucgc	cuucgcagag	gaacuuccug	cuccaguaaa	agcgauugaa	240
aaacagggca	uuacaaucac	caaaacauuc	gaugcccccg	gaggaaucaa	agguuauuc	300
ggaaaguuac	aggauauagg	cgucaccauc	uaccugacuc	cagaugguaa	gcacgcuauc	360
ucugguuaca	uguacaacga	gaaaggugaa	aaccugagua	acacacuuau	cgaaaaagaa	420
auuuacgcac	cagccggacg	cgaaaugugg	caacggauug	aacaaucCCA	cuggcuccuc	480
gacgguaaaa	aagaugcgcc	ggucuuuguc	uacgucuuuc	ccgaucCGUU	cugcccauau	540
uguaaaacagu	ucuggcagca	ggcgcgccc	uggguagauu	cuggcaaagu	gcauuuaga	600
acauuguuug	uugggguuau	caagccagaa	agcccgcgca	cagcagcggc	aaauucugcc	660
uccaaagauc	ccgcaaaaac	cuggcaacaa	uaugaagccu	cugguggcaa	gcuu	714

<210> 5

<211> 714

<212> DNA

<213> Escherichia coli viaA

<400> 5

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aaacaaagg	caatcacctg	atctaagctc	ttacctatga	cagtgatagg	ttatgccttt	120
tactcgactt	ttgcactgac	tgaaaaggac	aaattaatgt	taaaaaagat	acttttactg	180
gctctgcttc	ctgcaatcgc	cttcgcagag	gaacttcctg	ctccagtaaa	agcgattgaa	240
aaacagggca	ttacaatcat	caaaacattc	gatgcccccg	gaggaatgaa	aggttatctc	300
ggaaagtatc	aggatatggg	cgtcaccatc	tacctgactc	cagatggtaa	gcacgctatc	360
tctggttaca	tgtacaacga	gaaagggtgaa	aacctgagta	acacacttat	cgaaaaagaa	420
atttacgcac	cagccggacg	cgaaatgtgg	caacggatgg	aacaatccca	ctggctcctc	480
gacggtaaaa	aagatgcgcc	ggtcattgtc	tacgtcttcg	ccgatccgtt	ctgcccata	540
tgtaaacagt	tctggcagca	ggcgcgccc	tgggtagatt	ctggcaaagt	gcaattaaga	600
acattgttgg	ttgggggttat	caagccagaa	agcccgcgca	cagcagcggc	aattcttggc	660
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<210> 6

<211> 1050

<212> RNA

<213> Escherichia coli ddlB

<400> 6

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uguccagcau	aacgucaaua	cgucCCcAUC	cuuugcaacc	uaacgucguc	caugcuuuca	180
gcacuaaugg	cugcaaaauug	gccucuugug	acgcuuccag	accugcgggg	cagaaauacu	240
gugucucauc	agagagauac	uucgccucau	aaucuuagaa	gguuccggac	gguuagaauac	300
guauugacgg	uaaaauuuu	ucaccgagua	ucgcaaccgu	gaacuccggc	ccacuuagcc	360
auuuuucaau	caauacuucu	ucaucgugcu	gaaaugccaa	ucuuuaugca	ucuuuagag	420
cauuuucugc	uacuaauuuu	gacauucCCA	cacuggaacc	uucgcggcuc	ggcuuaacga	480
uaaccggcaa	accagagca	gaaauuucug	cuaacugcuu	aucgcucagg	ccuuuuucaa	540
acucugcgcg	gguaaacgcu	accacggcg	cgaccgguaa	accggcaccu	ugccauagaa	600

guuugcugcg	uaguuuaucc	auugaaagcg	cagaugccau	cacuccgcuu	ccgguaauaag	660
gcaagcccau	cagcucgagc	aucccccugca	gcguaccauc	uucaccgccc	cgaccgugua	720
gcgcgauaaa	cacuuucuga	aagcccacug	acuuacaguug	cgucacgucg	acuucuuucg	780
ggucgacagg	auacgcgcuca	auaccgccuu	cacgcacucc	ggcuaacacc	gcugcgccag	840
aaauacagaga	aacuucccgc	ucagcggagg	ucccacccaa	caggaccgcg	auuuuauacag	900
ucauguuguu	cuuccuccgg	aguuuugcggc	uucaguuuga	uuucagcuua	agaacgggca	960
auuuuuuccaa	uauuaccagc	ccccugaacg	agaauacaggu	cguuaccggu	uaauaccggu	1020
gccagcaucu	cggcuacccc	cgccggaucc				1050

<210> 7

<211> 451

• <212> RNA

• <213> Escherichia coli ampG

• <400> 7

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aaccgcaucg	gcgauauuuu	uguuggaggc	cuggaacgca	ccuuccaaccg	uguagcuggc	120
acgauaguuu	uuggucauuu	uguugccauu	cugcgcgguu	gcgaugaugg	cgauauccgc	180
uuuugucgcg	auguuuguagc	gcacguugcc	cugggacacg	ucagcauaca	guuggcuaac	240
gaugauuuugc	agauuaaccg	ggccauucgg	accaaccaug	uaaccacgcg	cggucaucug	300
uuuuuccagc	acuucuuugc	gcaggaaaacg	cagaucgcgg	gaggcgguca	ggguaacgau	360
uugauuaucg	cgggugacuu	uugccagcgc	cugaucggua	cgcugaucgg	caccauuau	420
gcuuacggug	acgcccuauc	ggcuuggauc	c			451

<210> 8

<211> 836

<212> DNA

<213> Escherichia coli secA

<400> 8

ctgcaggctt	taatgataag	atttgtgctg	taaatacggt	tgaatatgat	cgggatggca	60
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atctcttatt	agggatggtt	gcggcgagtt	taggtttgcc	tgcgctcagc	aacgcgcgcc	180
aaccaaaccg	gcccgcacaa	gcgacaaccc	gcaaccacga	gccttcagcc	aaagttaact	240
ttggtcaatt	ggccttgctg	gaagcgaaca	cacgcgcgcc	gaattcgaac	tattccgttg	300
attactggca	tcaacatgcc	attcgcacgg	taatccgtca	tctttctttc	gcaatggcac	360
cgcaaact	gcccgttgct	gaagaatctt	tgctctttca	ggcgcaacat	cttgcattac	420
tggatacgct	cagcgcgctg	ctgacccagg	aaggcacgcc	gtctgaaaag	ggttatcgca	480
ttgattatgc	gcattttacc	ccacaagcaa	aattcagcac	gcccgtctgg	ataagccagg	540
cgcaaggcat	ccgtgctggc	cctcaacgcc	tcacctaaac	acaataaacc	tttacttcat	600
tttattaact	ccgcaacgcg	gggcgtttga	gattttatta	tgctaataca	attgttaact	660
aaagttttcg	gtagtcgtaa	cgatcgcaac	ctgcgcggga	tgcgcaaagt	ggccaacatc	720
atcaatgcc	tggaaaccgga	gatggaaaaa	ctctccgacg	aagaactgaa	agggaaaacc	780
gcagagtttc	gtgcacgtct	ggaaaaaggc	gaagtgtctg	aaaatctgat	cccggga	836

<210> 9

<211> 836

<212> RNA

<213> Escherichia coli secA

<400> 9

uccgggauca	gauuuuccag	cacuucgccu	uuuuccagac	gugcacgaaa	cucugcgguu	60
uuccuuuua	guucuucguc	ggagaguuuu	uccaucuccg	guuccauggc	auugaugaug	120
uugaccacuu	ugcgcauccg	gcgcagggug	cgaucguuac	gacuaccgaa	aacuuuaguu	180
aaacuuuuga	uuagcauaau	aaaauucaaa	acgccccgcg	uugcgaguuu	aaauaaauga	240
aguaaagggu	uaauuguguu	aggugaggcg	uugagggcca	gcacggaugc	cuugcgccug	300
gcuuauccag	acgggcgugc	ugaauuuugc	uuguggggga	aaaugcgcau	aaucaaugcg	360

auaacccuuu	ucagacggcg	ugccuuccug	ggucagcagc	gcgcugagcg	uauccaguaa	420
ugcaagaugu	ugcgccugaa	gaggcaaaga	uucuuacagca	acgggcagug	uuugcggugc	480
cauugcgaaa	gaaagaugac	ggauuaccgu	gcgaauaggca	uguugaugcc	aguaaucaac	540
ggaauaguuc	gaauucgggc	ggcguguguu	cgcuuccagc	aaggccaauu	gaccaaaguu	600
aacuuuggcu	gaaggcucgu	gguuugcgggu	ugucgcuuuu	gcgggcgcgu	uugguucggc	660
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ccagaaguag	cguuuaccaa	acugucgcca	gcgcgucagu	auccacuca	cguuauugcc	780
aucccgauca	uauucaaacg	uauuuagcgc	acaaaucuaa	ucauuaaagc	cugcag	836